From: Bill Baker
To: Microsoft ATR
Date: 1/24/02 11:15am
Subject: Microsoft Settlement

To the Department of Justice,

I am grateful that the Tunney Act requires the acceptance of public comment on a case such as Microsoft's.

This particular comment focuses on Microsoft's behavior with respect to the Java programming language. In summary, I believe that any settlement agreement must strictly require Microsoft to either support cross-platform compatibility standards, or to assist third parties in developing support for them, in Microsoft Windows, and to allow their inclusion, in fully-functioning and fully-compatible form, on newly purchased computers running Windows. A few examples of such standards are Posix, Java, TCP/IP, .NET, Open/GL, Kerberos, and NFS.

Summary: As a professional programmer, I have been dismayed at the results of Microsoft's oppressive response to Java. When Bill Gosling and a team of engineers at Sun Microsystems invented Java, they created a foundation for software that could run on any operating system, transparently, without recompilation. Microsoft appears to have seen this as a threat and has tried to both fragment and debilitate Java, using the leverage of its operating system monopoly. Microsoft's attacks have limited Java's potential to make computing easier and more universal, and appear to have been motivated not by any technological motivation, but merely by the desire to maintain a monopoly on operating systems.

Java's Potential: Java is a language that simply takes modern computer language principles, implements them elegantly and simply, and uses them to provide a means to write software that will run on virtually any computer. Microsoft was one of its first adopters. Microsoft licensed Java from Sun Microsystems and quickly developed, for Windows, one of the best environments to develop and run Java programs. At the same time, many other companies had developed or licensed Java environments, including IBM and Netscape.

Microsoft's Actions: In addition to building a fantastic Java system for Windows, Microsoft also immediately snubbed its license contract with Sun, by removing certain parts (Java Native Interface, or JNI) of the Java language from its own implementation and substituting its own (Component Object Model, or COM). The effect was to make Microsoft's Java subtly but very deliberately incompatible with Sun's standard. Full compatibility would have been required if Java was to become an OS-neutral platform. When Sun protested, Microsoft simply refused to comply with the contract it has previously agreed to. A long court

battle ensued, with the result that Microsoft ceased active development on Java, ultimately disabling it by default in Windows XP. There appear to have been no technological reasons for Microsoft's actions.

It is understandable that Microsoft would want to add extensions to Java to connect it to Windows (COM), but that extension could have been added

- 1. without breaking compatibility with Sun's standard (in fact, it has been added in such a fashion by other software companies as Java-COM bridges), and
- 2. without modifying an important part of Sun's specification for Java (JNI).

Recourse: I believe that since Microsoft has a monopoly on desktop operating systems for Intel x86 architecture computers, and since it is in the public interest that those computers be as fully functional as possible, and not artificially limited in functionality solely to allow Microsoft to retain its monopoly, Microsoft Windows should be strictly required to interoperate with cross-platform standards. Interoperability need not be the sole responsibility of Microsoft, but I believe that Microsoft must

- 1. provide the documentation necessary to achieve interoperability, and
- 2. not hinder interoperation by compromising standards or by restricting deployment of software on new computers.

Sincerely, Bill Baker Software Engineer bbbaker@1to1service.com http://www.orangecrayon.com